ADE-208-058E(Z)

HSM107S
Silicon Schottky Barrier Diode for System Protection

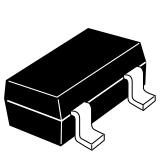
HITACHI

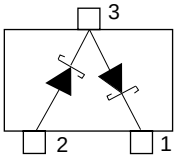
Rev. 5
Aug. 1995

Features

- Low V_F and high efficiency.
- HSM107S which is interconnected in series configuration is designed for protection from not only external excessive voltage but also miss-operation on electric systems.
- MPAK package is suitable for high density surface mounting and high speed assembly.

Pin Arrangement





(Top View)

1 Cathode 2
2 Anode 1
3 Cathode 1
Anode 2

Ordering Information

Type No.	Mark	Package Code
HSM107S	C 5	MPAK

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	8	V
Peak forward current	I_{FM} **	0.1	A
Non-Repetitive Peak forward surge current	I_{FSM} *	0.5	A
Average forward current	I_o **	50	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-65 to +125	°C

* Square wave, 10ms
** Per one device

Electrical Characteristics * (Ta = 25°C)

Item		Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	8	—	—		V	I_R = 1.0 mA
Reverse current	I_R	—	—	30		μA	V_R = 5 V
Forward voltage	V_F	—	—	0.3		V	I_F = 10 mA
ESD Capability	—	100	—	—		V	** C=200pF, Both forward and reverse direction 1 pulse

* Per one device
** Failure Criterion ; $I_R \geq 60\mu A$ at V_R=5V

HSM107S

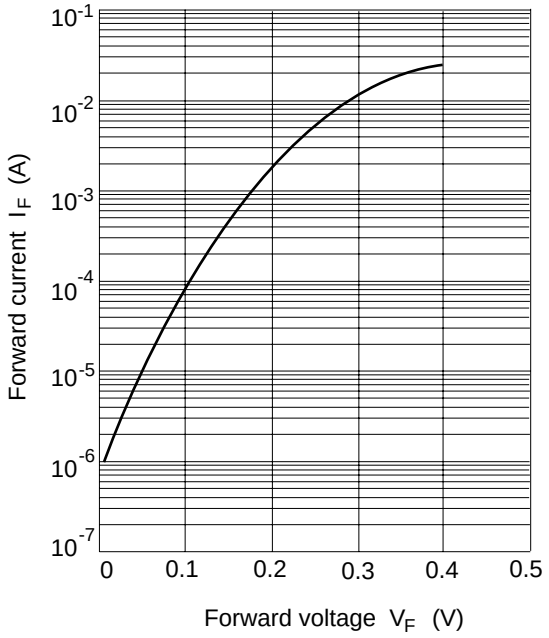


Fig.1 Forward current Vs. Forward voltage

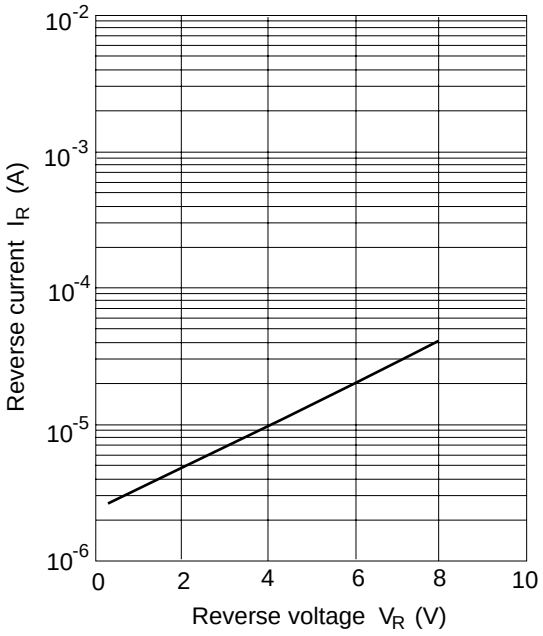


Fig.2 Reverse current Vs. Reverse voltage

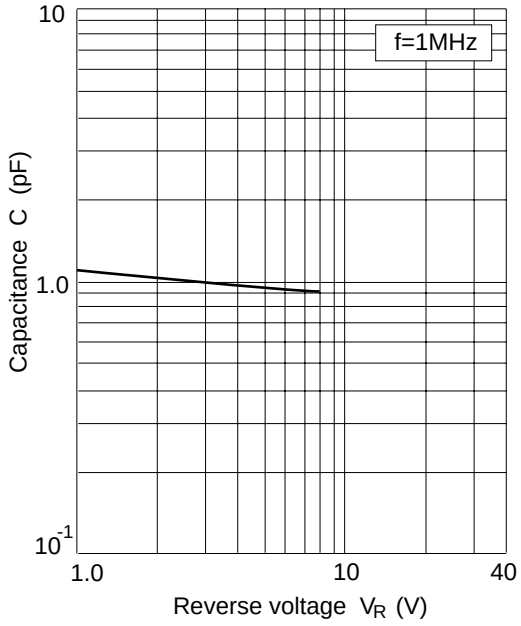
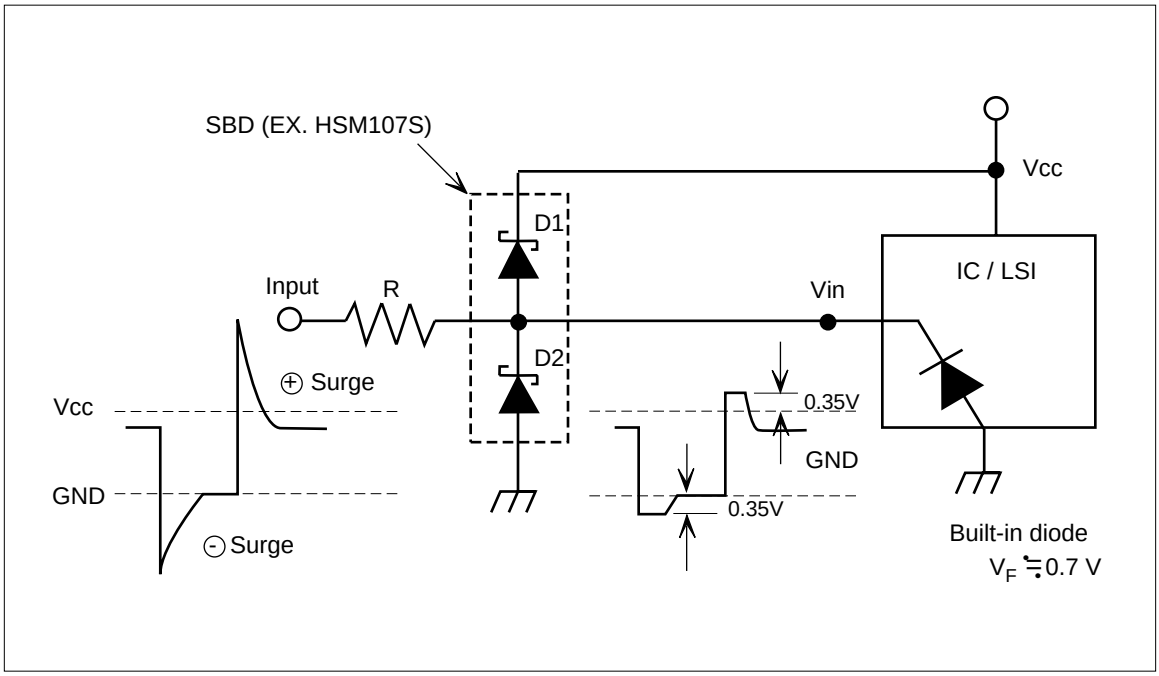


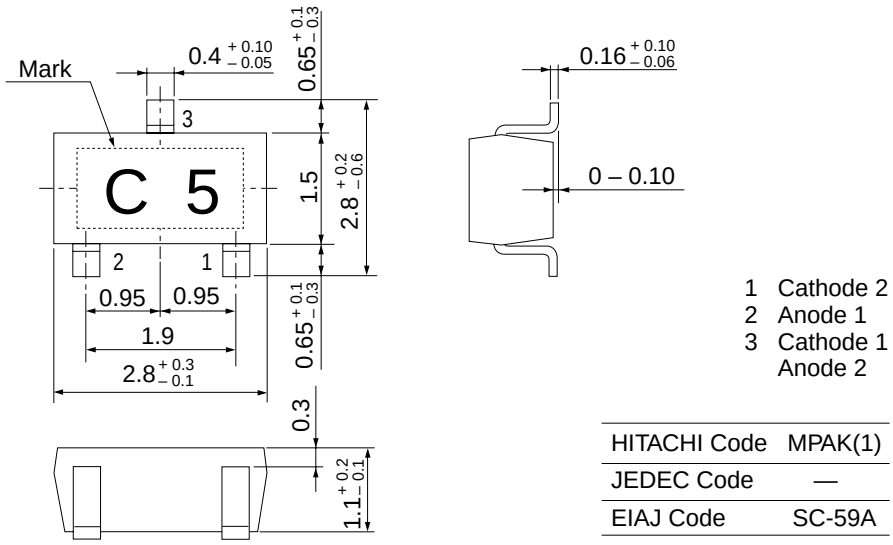
Fig.3 Capacitance Vs. Reverse voltage

Example of application circuite



Package Dimensions

Unit: mm



1 Cathode 2
2 Anode 1
3 Cathode 1
Anode 2

HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011